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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,750	04/30/2001	Walter Dixon III	345708004US	3459

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BUCKLEY, MASCHOFF, TALWALKAR LLC  
5 ELM STREET  
NEW CANAAN, CT 06840

EXAMINER
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BROSS, EDWARD J

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 07/02/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/845,750

Applicant(s)

DIXON ET AL.

Examiner

Edward Bross

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 1-48 are pending in this application.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 9 and 13 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims language is unclear for the following reasons:

- a. Claim 9 – it is unclear how one service routine has access to the response of another service routine enabling it to log this other response.
- b. Claim 13 claims “the determining is performed by a match routine of the sub-application” however the parent claim, claim 1, claims “determining whether the received request should be dispatched to the sub-application” thus the determining step is performed before the sub-application gets the request, making it impossible for the sub-application to perform the determining step.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-10, 12-19, 28, 32-37 and 40-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abjanic (6,732,175) in view of Underwood (6,718,535).

6. As to claims 1, 37 and 44, Abjanic discloses a method for dispatching requests to perform services to sub-applications comprising (Fig. 5):

receiving a request to perform a service (col. 3, lines 1-5); and

for a plurality of sub-applications,

determining whether the received request should be dispatched to the sub-application (col. 3, lines 1-5 and Fig. 2); and

when it is determined that the request should be dispatched to the sub-application, invoking a service routine of the sub-application passing the request (implied in directing requests to a specific server).

7. Abjanic does not disclose the sub-applications use different logic models or providing a context for the sub-applications that is shared among them.

8. Underwood discloses a context object that is shared among sub-applications (col. 324, lines 57-62).

9. Underwood does not disclose different logic models, however it is well known in the art to use different logic models in different components of an application.

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10. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the context object of Underwood with the system of Abjanic in order to facilitate shared application-wide configuration information efficiently and to combine the use of different logic models in the sub-applications in order to use the architecture that is most appropriate for handling different requests.

11. As to claims 2, 41 and 45, Abjanic discloses the sub-applications are ordered and the invoking of the service routines is performed in the order of the sub-applications ("round-robin" col. 4, lines 17-20).

12. As to claim 3, Abjanic discloses the determining includes determining whether a match criteria for the sub-application matches the received request (col. 3, lines 1-5).

13. As to claims 4 and 46 Abjanic and Underwood do not disclose the requests are HTTP requests with a URL and the match criteria is a regular expression relating to the URL. However, the use of regular expressions in URL HTTP requests is well known in the art (for example, the routing of \*.pl requests to a Perl module and \*.html requests to a static handler in a web server).

14. It would have been obvious to one of ordinary skill in the art at the time of the invention to use regular expressions relating to the URL of an HTTP request in the system of Abjanic in order to efficiently determine the correct server for a given file type.

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15. As to claims 5, 42 and 47, Abjanic and Underwood do not disclose suppressing the invoking of additional service routines when an invoked service routine returns an indication to suppress the invoking of additional service routines. However, the use of such return values is well known in the art (message handlers in windowing toolkits where a return value indicates whether a given widget has handled an event or if it needs further processing).

16. It would have been obvious to one of ordinary skill in the art at the time of the invention to suppress the invoking of additional service routines when an invoked service routine returns an indication to suppress the invoking of additional service routines in the system of Abjanic in order to have flexibility as to which server will handle a request dynamically without the dispatcher needing to make such a determination.

17. As to claims 6, 43 and 48 Abjanic and Underwood do not disclose suppressing the invoking of additional service routines when an invoked service routine responds to the received request. However, this is an obvious variation on that claimed in claim 5 above, where the the result itself is the indication to suppress.

18. It would have been obvious to one of ordinary skill in the art at the time of the invention to suppress the invoking of additional service routines when an invoked service routine responds t the received request in the system of Abjanic in order to have flexibility as to which server will handle a request dynamically without the dispatcher needing to make such a determination.

19. As to claim 7, Abjanic and Underwood do not disclose an invoked service routine performs user authentication and indicates to suppress invoking of additional service routines

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when a user cannot be authenticated. However, this is well known in the art (such as the authentication module in a web server that must authenticate a user before allowing the server to return a page).

20. It would have been obvious to one of ordinary skill in the art at the time of the invention to use such an authentication scheme with the system of Abjanic in order to provide security for the accessed services.

21. As to claims 8 and 9, Abjanic and Underwood do not disclose an invoked service routine logs the received request or the response of another invoked service routine. However, the logging of received requests is well known in the art (access logs for a web server).

22. It would have been obvious to one of ordinary skill in the art at the time of the invention to have invoked service routine log received requests in the system of Abjanic in order to decrease the costs associated with debugging the system.

23. As to claim 10, Abjanic and Underwood do not disclose transforming the received request from one protocol to another. However, such transformation are well known in the art (WAP gateways that transform between HTML and WML).

24. It would have been obvious to one of ordinary skill in the art at the time of the invention to use such a transforming between protocols in the system of Abjanic in order to allow access to different clients.

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25. As to claim 12, Abjanic does not disclose that the match criteria is in a configuration file for the sub-application. However, the use of configuration files is well known in the art.

26. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the match criteria for the sub-applications in configuration files in the system of Abjanic to prevent having to re-enter this information whenever the system is restarted.

27. As to claim 13, Abjanic discloses determining is performed by a match routine of the sub-application (it can be assumed that the servers will parse the message and only process it if it is of the correct and expected type).

28. As to claim 14, 15 and 16 Abjanic and Underwood do not disclose an interaction-based model an action-view model or a workflow-based model. However, these logic models are all well known in the art.

29. It would have been obvious at the time of the invention to use these logic models in the sub-applications of Abjanic in order to use the architecture that is most appropriate for handling different requests

30. As to claim 17, Abjanic discloses the sub-applications form an overall application (Fig. 1). Abjanic does not disclose the provided context is an application-level context.

31. Underwood discloses the provided context is an application-level context (col. 324, lines 57-62).

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32. As to claim 18, Abjanic discloses the sub-applications form an overall application that is web-based (Fig. 1).

33. As to claim 19, Abjanic discloses the request is received from a web-server environment (Fig. 1 and col. 4, lines 21-32).

34. As to claim 28, it is rejected for the same reasons as claims 1, 3 and 13 above.

35. As to claims 32 and 40, Abjanic discloses each service routine is passed a request parameter (incoming message) and returns a response parameter (return message, col. 10, lines 50-56).

36. As to claim 33, it is rejected for the same reason as claim 2 above.

37. As to claim 34, it is rejected for the same reason as claim 5 above.

38. As to claim 35, it is rejected for the same reason as claim 6 above.

39. As to claim 36, it is rejected for the same reason as claim 4 above.

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40. Claims 11, 20-27, 29-31, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abjanic (6,732,175) in view of Underwood (6,718,535) in further view of Dillenberger et al. (6,732,139)

41. As to claims 11, 29-31, 38 and 39, Abjanic and Underwood do not disclose:  
retrieving initialization parameters for the sub-application;  
retrieving an indication of a class for the sub-application; and  
instantiating an instance of the class with the retrieved initialization parameters.

42. Dillenberger discloses:  
retrieving initialization parameters for the sub-application;  
retrieving an indication of a class for the sub-application; and  
instantiating an instance of the class with the retrieved initialization parameters (col. 4, lines 26-31).

43. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the configuration and initialization of Dillenberger with the system of Abjanic and Underwood in order to change the implementation classes of the sub-applications without having to recompile the entire system..

44. As to claim 20, it is rejected for the same reasons as claim 1, 3, and 11 above.

45. As to claim 21, it is rejected for the same reasons as claims 4 and 11 above.

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46. As to claim 22, it is rejected for the same reasons as claims 2 and 11 above.
47. As to claim 23, it is rejected for the same reasons as claims 5 and 11 above.
48. As to claim 24, it is rejected for the same reasons as claims 6 and 11 above.
49. As to claim 25, it is rejected for the same reasons as claims 11 and 14 above.
50. As to claim 26, it is rejected for the same reasons as claims 11 and 15 above.
51. As to claim 27, Abjanic discloses that each of the sub-applications implement the same interface (as can be inferred that they all get passed the request in an identical manner).
52. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Bross whose telephone number is 703-305-8754. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 703-305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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MENG-AL T. AN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100